

**RINKER SCHOOL OF CONSTRUCTION MANAGEMENT  
UNIVERSITY OF FLORIDA**

## CONSTRUCTION DRAWING

**COURSE NUMBER:** *BCN 1251C*

**NUMBER OF CREDIT HOURS:** 3

**RINKER HALL ROOM 140**

	MONDAY	WEDNESDAY
SECTION 07GH	9:35 AM – 11:30 AM	9:35 AM – 11:30 AM
SECTION 0627	1:55 PM – 3:50 PM	1:55 PM – 3:50 PM

**INSTRUCTOR:** *Robert Ries*

*332 Rinker Hall  
rries@ufl.edu  
352 273 1155*

**OFFICE HOURS:** *Mondays 12:55 – 1:40 pm*

**GRADUATE TEACHING ASSISTANT:** *Ms. Skandha Upadhyay*

*328 Rinker Hall  
skandhaupadhyay@ufl.edu*

**OFFICE HOURS:** *TBD*

**COURSE WEBSITE:** *<http://lss.at.ufl.edu>*

**ADDITIONAL RESOURCES:**

Architectural Drawing and Light Construction, Philip A. Grau, Edward J. Muller, 8th Edition ISBN-10: 0135132150, ISBN-13: 9780135132159

Building Construction Illustrated, Francis D.K. Ching

Architectural Graphic Standards, Ramsey and Sleeper Architectural Graphics, Francis D.K. Ching

Reading Architectural Working Drawings, E L Muller Construction Details for Commercial Buildings, G E Wiggins

Other resources provided on course website

**COURSE DESCRIPTION:** *Provides basic working knowledge of architectural graphics, practice in instrumental drawing and experience in free hand sketching.*

**PREREQUISITE KNOWLEDGE AND SKILLS:** *None*

**PURPOSE OF COURSE:** *An effective construction process depends on communication of the owner's and architect's objectives and intent for a project. Construction drawings, and specifications are the documents are the basis for a contractual agreement between an owner and contractor as well as communicate in drawings and words what should be constructed. Construction documents and shop drawings are used throughout the construction process to estimate costs correctly, schedule activities optimally, order acceptable materials, allocate labor efficiently, build accurately, and generally manage construction up to project close out.*

*The course will introduce construction drawings and specifications and the use of drawings and specifications in the construction process. The course will focus on plan reading skills and use of drawings in the construction process from a construction manager's perspective.*

**COURSE OBJECTIVES:** *By the end of this course, students will be able to:*

- 1. Explain the role of construction drawings and specifications in the construction process. [SACS SLO 1, ACCE SLO 7]*
- 2. Demonstrate plan reading skills by interpreting and explaining typical construction documents such as scaled plan, elevation, section, detail, structural, mechanical, and electrical drawings and door, window, finish, and equipment schedules. [SACS SLO 1, ACCE SLO 7]*
- 3. Utilize software to apply graphical skills to create construction drawings. [SACS SLO 1, ACCE SLO 10]*
- 4. Read and create construction drawings in order to facilitate communication in the construction industry. [SACS SLO 1, ACCE SLO 7]*

**HOW THIS COURSE RELATES TO THE STUDENT LEARNING OUTCOMES IN THE CONSTRUCTION MANAGEMENT PROGRAM:** *This course relates to*

*SACS SLO 1: Apply knowledge of engineering, materials, methods, equipment, and processes to safely construct buildings and structures.*

*and*

*ACCE SLO 7: Analyze construction documents for planning and management of construction processes.*

*ACCE SLO 10: Apply electronic-based technology to manage the construction process.*

*SACS = Southern Association of Colleges and Schools*

*ACCE = American Council for Construction Education*

*SLO= Student Learning Outcome*

**TEACHING PHILOSOPHY:** *In this course, lecture and lab sessions complement one another. Students will be able to apply and reinforce learning through hands-on assignments with construction documents and communication tools that reinforce the concepts in lectures and provides real-world examples used in the construction industry. Students will demonstrate learning by demonstrating plan reading skills acquired in the course and creating examples of construction documents. Examples and practice in-class and in assignments will assess and guide learning. Questions and discussions that enhance learning for all are strongly encouraged.*

**INSTRUCTIONAL METHODS:** *Lectures will introduce concepts and labs will allow students to apply and demonstrate skills; a final project will assess knowledge and skills acquired in the course.*

## **COURSE POLICIES:**

**ATTENDANCE POLICY:** *Required at all lectures and labs.*

**MAKE-UP POLICY:** *Missed assignments, quizzes, and exams can be made up with instructor's permission prior to assignment due date or quiz/exam date.*

**ASSIGNMENT POLICY:** *Late assignments will be penalized.*

**COURSE TECHNOLOGY:** *Software will be available in the Rinker School computer lab and through UF Apps. Some software may be available for installation on student computers.*

## **UF POLICIES:**

### **UNIVERSITY POLICY ON ACADEMIC ACCOMMODATIONS:**

Please see <https://disability.ufl.edu/students/>

**UNIVERSITY POLICY ON ACADEMIC MISCONDUCT:** Academic honesty and integrity are fundamental values of the University community. Students should be sure that they

understand the UF Student Conduct Code at <https://sccr.dso.ufl.edu/process/student-conduct-code/>

The Honor Pledge: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Student Honor Code. On all work submitted for credit by Students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

**COMMUNICATION COURTESY:** All members of the class are expected to follow rules of common courtesy in all email messages, discussions and other communication.

## GETTING HELP:

For issues with technical difficulties for E-learning, please contact the UF Help Desk at:

- [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu)
- (352) 392-HELP (4357)
- <https://lss.at.ufl.edu/>

## GRADING POLICIES:

<i>Attendance</i>	<i>10%</i>
<i>In-class exercises &amp; Homework</i>	<i>35%</i>
<i>Midterm Exam</i>	<i>20%</i>
<i>Final Project</i>	<i>35%</i>

*TOTAL*

*100%*

*Most of the work will be completed in-class throughout the semester, therefore attendance is critical. There are no make-ups for missed classes unless you discuss your absence with the instructor before the classes you miss and provide appropriate documentation within 1 week to support your absences. Three (3rd) unexcused absences without penalty; fourth (4th) absence FINAL LETTER GRADE DOCKED 1 LETTER!*

### **GRADING SCALE:**

*Letter Grade % Grade*

*A >= 93.3*

*A- >= 90*

*B+ >= 86.7*

*B >= 83.3*

*B- >= 80*

*C+ >= 76.7*

*C >= 73.3*

*C- >= 70*

*D+ >= 67.7*

*D >= 63.3*

*D- >= 60*

*E < 60*

## COURSE SCHEDULE:

Week #	Class #	Day	Date	Topics
1	1	Wed	21-Aug	Contract document overview; Plans and specifications
	2	Mon	26-Aug	Plan reading
2	3	Wed	28-Aug	Scale and Lettering
	4	Mon	2-Sep	<b>Labor Day</b>
3	5	Wed	4-Sep	Revit / BIM intro; M. Ghesari
	6	Mon	9-Sep	Line Types Symbols Abbreviations
4	7	Wed	11-Sep	Basic projections
	8	Mon	16-Sep	SketchUp
5	9	Wed	18-Sep	Construction documents on the construction site; coordination
	10	Mon	23-Sep	Floor Plans
6	11	Wed	25-Sep	Elevations and Sections
	12	Mon	30-Sep	Reflected Ceiling Plans
7	13	Wed	2-Oct	Stairs and Details
	14	Mon	7-Oct	Schedules and Specifications
8	15	Wed	9-Oct	Site Plan
	16	Mon	14-Oct	Field work: site visit
9	17	Wed	16-Oct	Mechanical/Plumbing/Electrical
	18	Mon	21-Oct	Structural
10	19	Wed	23-Oct	Review for Midterm Exam
	20	Mon	28-Oct	<b>Midterm Exam</b>
11	21	Wed	30-Oct	Portfolio: Floor Plan and Reflected Ceiling Plan
	22	Mon	4-Nov	Portfolio: Elevations
12	23	Wed	6-Nov	Portfolio: Elevations (cont.)
	24	Mon	11-Nov	<b>Veterans Day</b>
13	25	Wed	13-Nov	Portfolio: Elevations and Section
	26	Mon	18-Nov	Portfolio: Door & Window Schedules
14	27	Wed	20-Nov	Portfolio: Detail wall section
	28	Mon	25-Nov	Portfolio: Details
15	29	Wed	27-Nov	<b>Thanksgiving</b>
	30	Mon	2-Dec	Portfolio: Cover Page and Table of Contents; Site Plan
16	31	Wed	4-Dec	<b>3:50PM PROJECT SUBMISSION DEADLINE</b>

Disclaimer: This syllabus represents the current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning. Such changes, communicated clearly, are not unusual and should be expected.